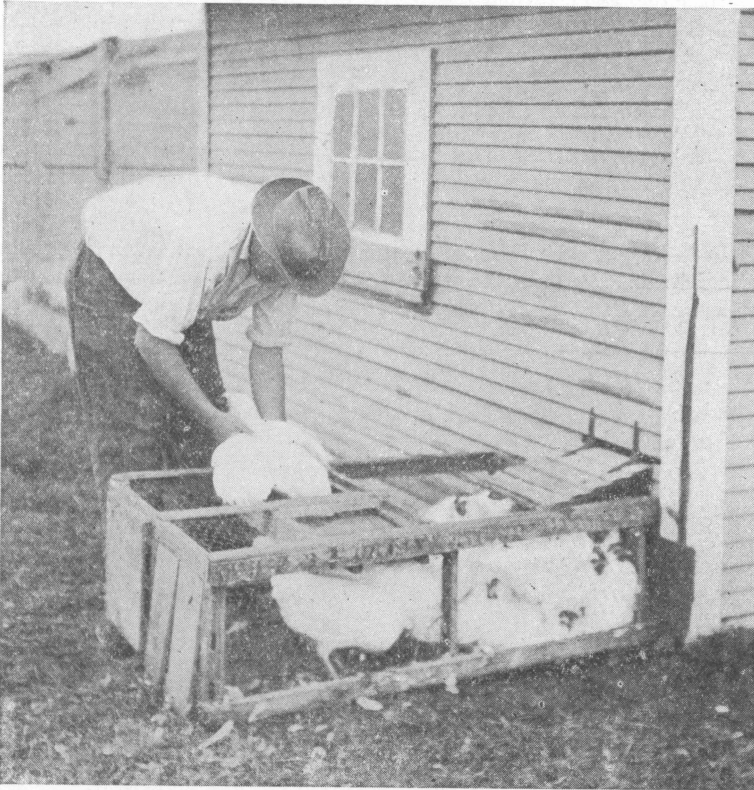


# POULTRY YARD EQUIPMENT



College Station, Texas

Agricultural and Mechanical College of Texas

Extension Service

## Foreword

It is generally the little things that make or break the poultry business. Such little things as insufficient mash hopper space, poor water facilities, lack of nesting equipment, with consequent dirty and broken eggs and the like, have often cut profit to almost nothing for poultrymen who might otherwise have succeeded.

A few dollars worth of catching crates, mash hoppers, broody coops and such equipment will change the care and management of a flock of a few hundred hens from several hours drudgery per day to a quicker, easier and more efficient job. Proper equipment will enable the farmers who have other things to do also, to manage a flock of several hundred hens with a minimum amount of labor.

The equipment shown in this bulletin is for the most part merely that found on the yards of successful farm poultrymen here and there over the state and assembled here for the benefit of all.

Bulletins on other phases of the poultry business, such as feeding, culling, housing etc., may be secured from the **county or home demonstration agent** or from the Extension Service, College Station, Texas.

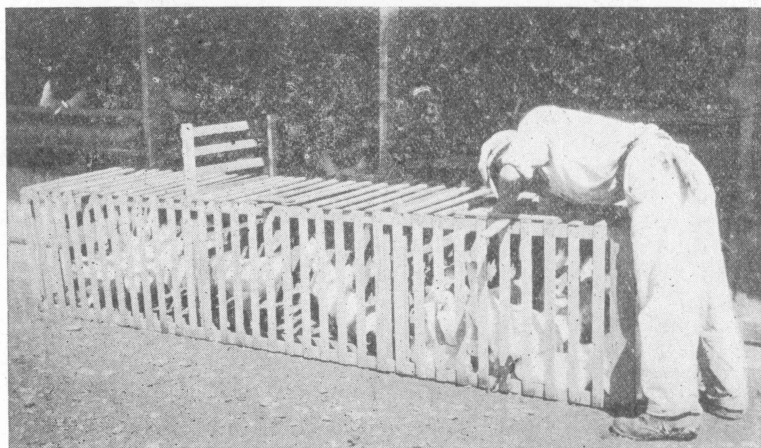


Figure 1—Large 3 compartment catching crate

# POULTRY YARD EQUIPMENT

E. N. HOLMGREEN, Poultry Husbandman

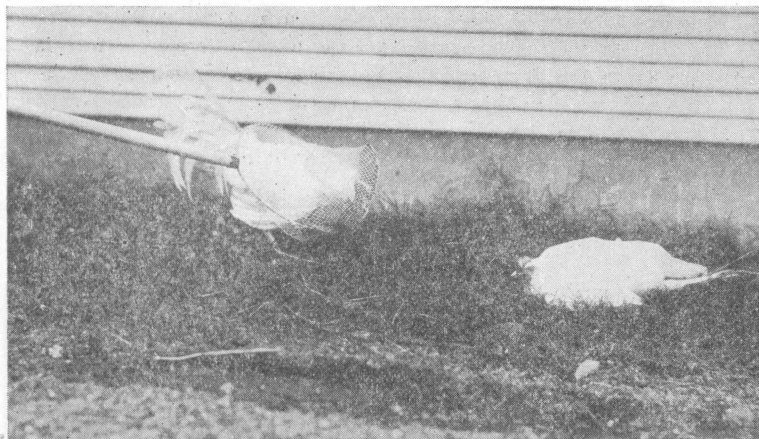


Figure 2—Catching single birds with net and hook

## CATCHING COOP

Whenever chickens are to be handled for culling, worming, treating for diseases, or transfer to other quarters, and the like, a catching coop will save much time and labor.

Comparing the front cover picture with that of Fig. 1 will show that most any sort of slatted or wire covered crate will serve as a catching coop. The coop should have an opening in one end to correspond to an opening in the chicken house. A door in the top of the coop will allow the removal of the chickens as needed. Large catching coops should have a movable partition to further divide it so that the birds can be reached easily.

The coop is placed against the chicken house and the birds driven into it, the opening is stopped up and from 25 to 100 chickens are ready to be caught with a minimum of labor and excitement to the flock.

For picking up single birds, nothing is superior to the net that is shown at the left in Fig. 2. The old time "chicken hook" shown at the right is also useful for this purpose.

## MASH HOPPERS

The "reel" type hopper such as is shown in Figs. 3 and 4, is rapidly taking the place of the large cumbersome hoppers that hold several days' supply of feed. They do not take up as much space or obstruct as much light; are easier to handle, easier to clean, and the birds eat out of them more readily.

The revolving "reel" (a piece of 1 x 2 or 1 x 3) prevents the birds from standing in a position to deposit their droppings in the feed. The reel has a nail in each end for an axle, which fits in the slots in the end pieces. This reel lifts out, permitting the trough to be cleaned easily or refilled. Mash is put out each day, ensuring its being fresh and enabling the poultryman to control the feed consumption. One such trough is sufficient for 50 hens, or one foot of trough to each 10 hens.

The stand, which is separate from the trough, is merely to raise the feed away from the litter and dirt on the floor. It also raises the feed out of the way of hens that do not want to eat. The troughs should be placed across and not lengthwise the flock house.

An outdoor hopper may be made by removing the reel and fastening a "V" type cover to the end piece.

The boards on which the fowl stands may be set further from the trough for the larger breeds.

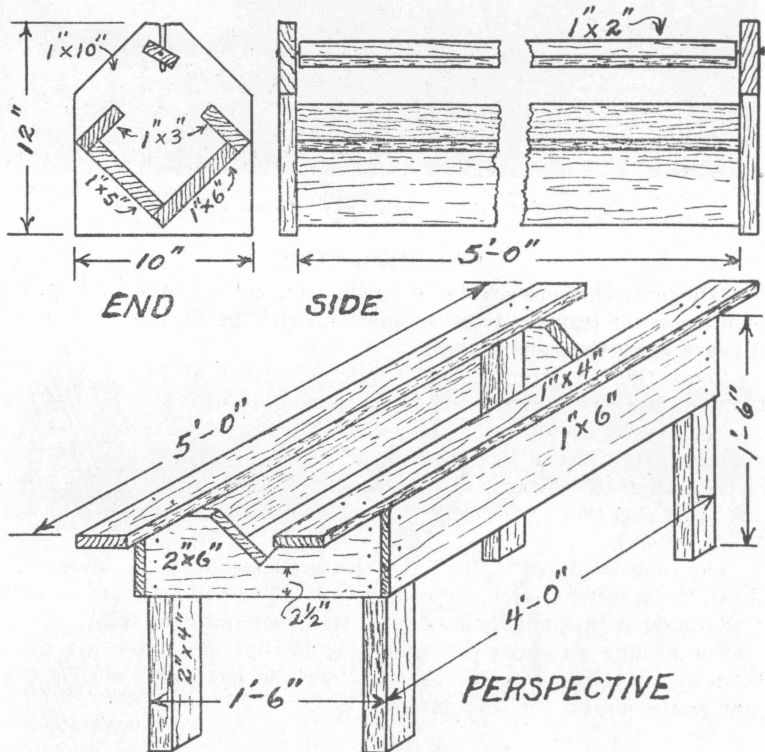


Figure 3—Details of mash hopper

### WATER FOR THE FLOCK

Supplying the flock with ample water facilities is a detail of management often neglected. A satisfactory system is a row of buckets in the flock house. One 14 or 16 qt. heavy galvanized iron bucket for each



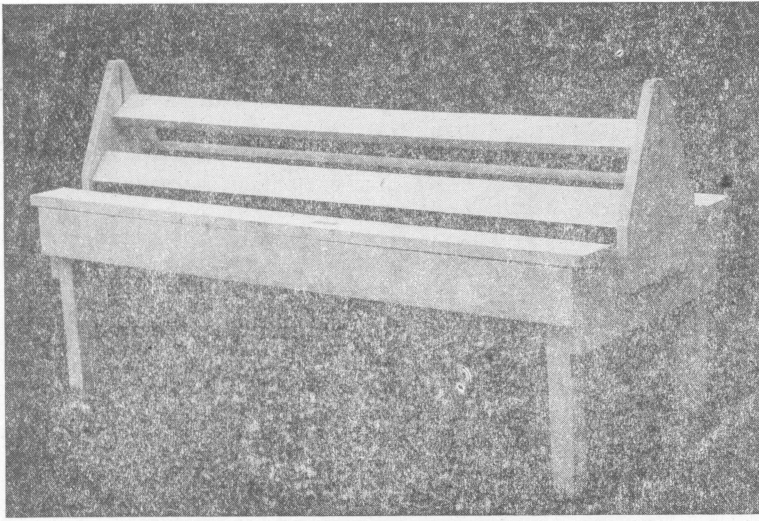


Figure 4—Improved "Reel" type mash hopper

40 hens is a good plan. Buckets of such size are high enough to prevent much dirt or litter from getting in the water.

The flock should be given fresh water twice daily and by using buckets as the water vessels it is more likely they will be washed out when they are refilled.

Running water in the flock house with a system such as illustrated in Fig. 6, is very convenient. There are a number of



Figure 5—A simple and effective water system

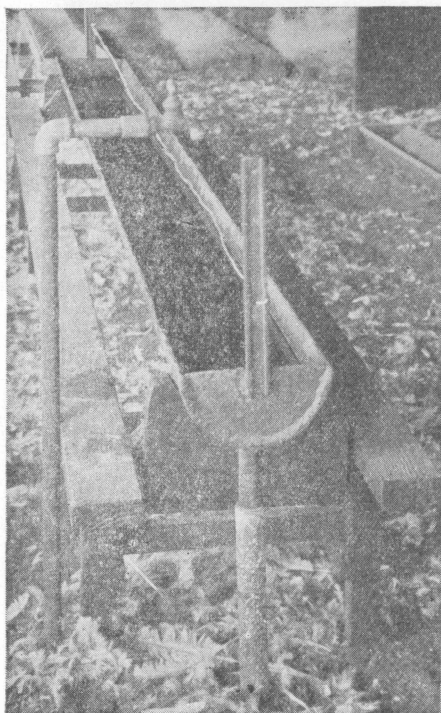


Figure 6—System for running water

Figs. 7 and 8, the sprouter is simply a frame holding a series of trays. Fine hardware cloth or metal punched with holes may be used as bottoms for the trays.

One gallon of dry oats will sprout enough for the day's feeding of 300 hens and the sprouter should be built with sufficient trays to furnish this daily supply. Sour or moldy oats should be avoided and this condition may be prevented, if it should occur, by the addition of a teaspoonful of formalin to each 6 quarts of warm water in which the oats are soaked the first night. In summer, it may be necessary to screen the sprouter to prevent fly maggots from growing in the oats.

float attachments on the market that will take the place of the faucet and automatically keep the water at a proper level. Notice the wire over the center of the trough which keeps chickens out of the water. A "reel" such as is used on the feed trough, is often used for this purpose. Where this type of water system is used, special care should be exercised to provide proper drainage of waste water to avoid wet sloppy places in the house. Attention is called to the drain pipe in this figure.

### OAT SPROUTER

An oat sprouter is very useful in providing green feed over periods, where for various reasons, no green feed can be grown on the range. As indicated in



Figure 7—Oat sprouter

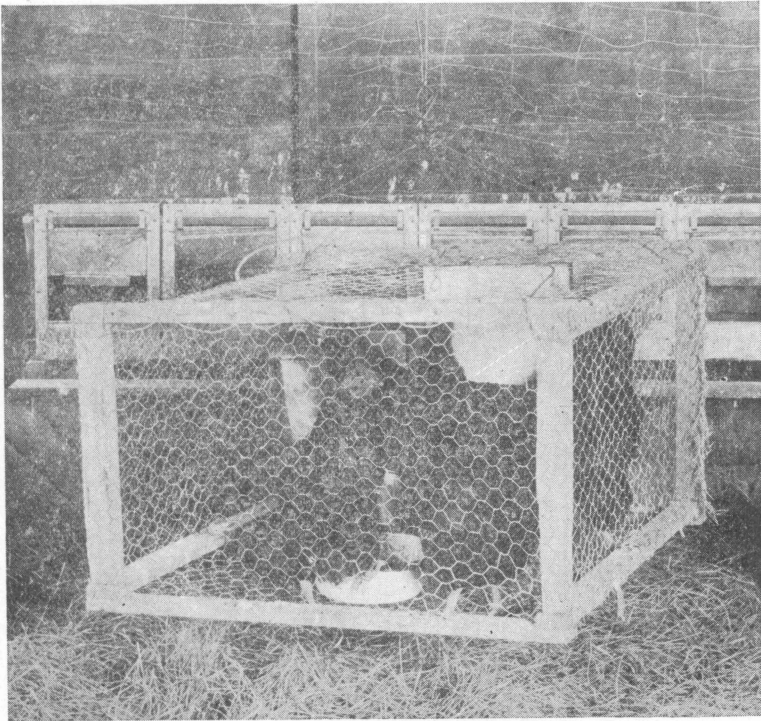


Figure 9—Hanging broody coop—note trap nests in back ground

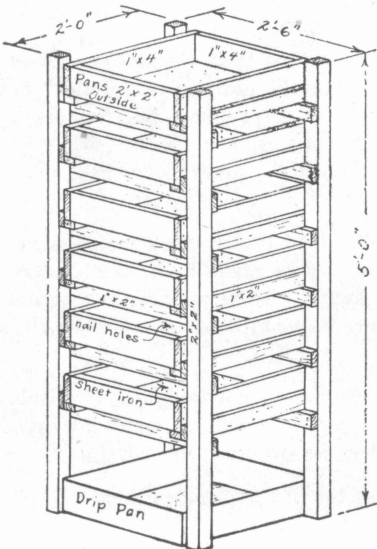


Figure 8—Details of oat sprouter

## BROODY COOPS

Broody hens are not profitable hens, and their broodiness should be broken up as quickly as possible. A wire coop such as shown in Fig. 9 swinging on wires from the roof and suspended a foot or so from the floor is very convenient. With the broody coop right in the flock house, it makes it easier for the poultryman to break up the broody hens promptly and with little trouble.

Broody hens should be fed the same as the layers.



Figure 10—Good nesting equipment

## NESTS

A sufficient number of the right kind of nests is a good investment. It improves the quality of eggs by reducing the number of "dirties" and the loss through breakage. It also helps to reduce the number of "prolapses" and "pick-outs" by providing a nest for the hen when she wants to lay, and giving her sufficient time to lay and recover her normal condition.

Nests should be 12 inches square and 14 inches high and one nest provided for each five hens. The nests may be made in tiers and placed at the end walls or partitions of the house. They may be constructed as indicated in Fig. 11 so that they are demountable in order to allow for thorough cleaning and disinfecting.

Placing nests under the dropping boards is not generally advisable as it obstructs the light and makes this space a loafing space for hens. It also makes it difficult to clean under the dropping boards.

At times of low production a part of the nests may be closed.



Figure 12—Trap nests

## TRAP NESTS

Fig. 12 above illustrates one type of trap nest front that is easily and quickly attached to the regular nests. Such trap nest fronts are comparatively cheap and very serviceable.

Farmers Bulletin No. 862 entitled "Simple Trap Nests" will give details of construction of home made trap nests.

Due to the length of time between trapping (ordinarily about an hour) poultrymen should supply not less than one nest for each five birds.

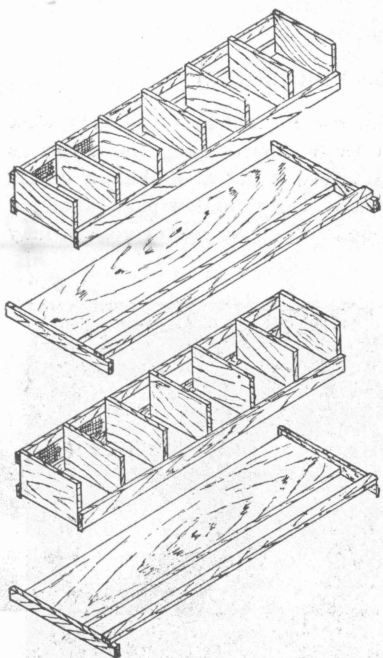


Figure 11—Details of demountable nests



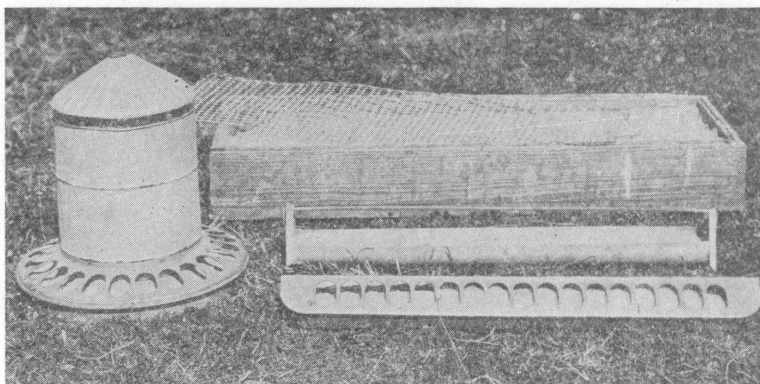


Figure 13—Baby chick feeders

### BABY CHICK FEEDERS

Several types of feeders for baby chicks are illustrated in Fig. 13. The trough at the rear is home-made. It is 4 inches deep and from 6 to 10 inches wide. A piece of  $\frac{1}{2}$  inch mesh hardware cloth is laid on top of the feed to prevent waste.

### WATERING DEVICES FOR CHICKS

There are many good watering devices for chicks. Fig. 14 below shows four types. It is essential that these devices keep the water as clean as possible, hold a good supply yet feed it out at a shallow depth, and be made so that they are easily cleaned. Open shallow pans, allowing the birds to get in the water, are not good. The two center vessels may be used for feeding milk.

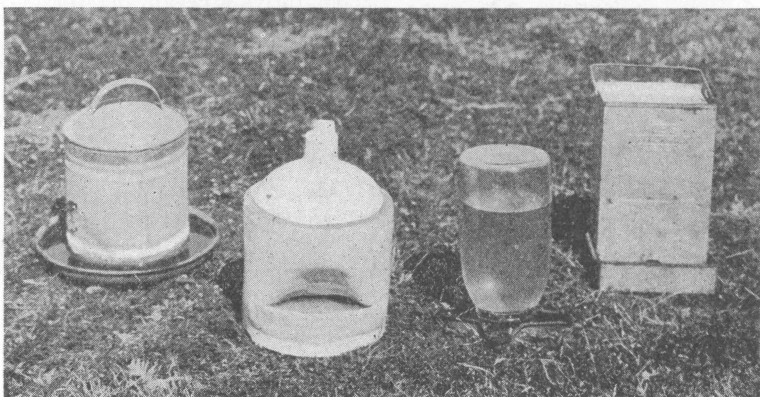


Figure 14—Baby chick watering devices



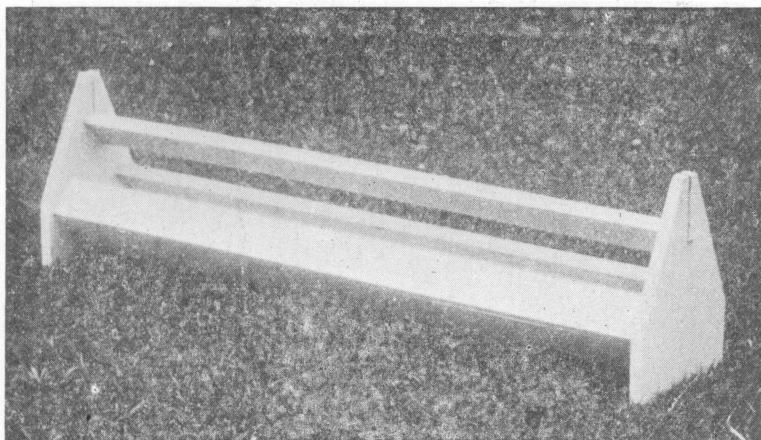


Figure 15—Feeder for growing chicks

### FEEDERS FOR GROWING CHICKS

After the young chicks have outgrown the types of feeders shown in Fig. 13 the "reel" type feeder shown below will serve very well. This trough is exactly the same as those recommended for grown fowls except that no stand is needed and the feeder may be placed directly on the floor or ground. As the pullets mature, the trough may be replaced on the stand and serve for the flock houses.

Several methods may be used in adjusting the height of the revolving reel to suit the size of the growing chicks. One method is to bore two or three holes in the edge of the end pieces, past the slot in which the axle of the reel fits. By inserting a nail in the various holes, the axles of the reel can be adjusted to any height desired. If the holes are bored at a slightly downward angle the supporting nails will not fall out.

Half grown chicks should have hopper space of one foot to about 15 or 18 birds. The space should gradually be increased as the chickens grow older until they are about ready for the flock house when the hopper space should be the same as for hens.

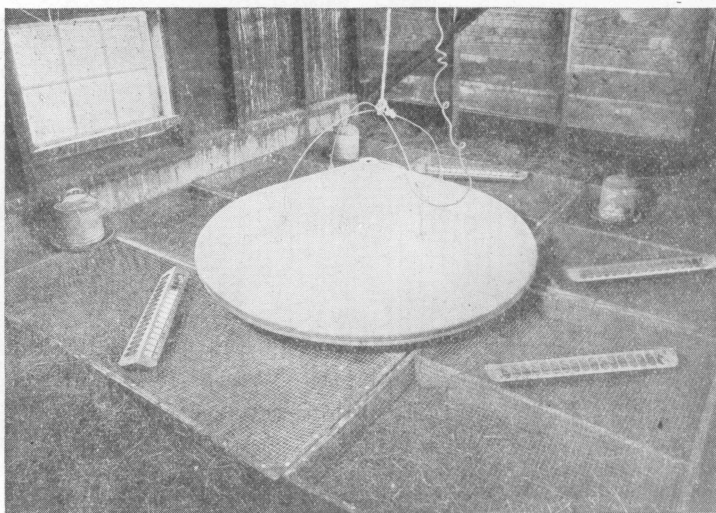


Figure 16—Hardware cloth brooder floor

### HARDWARE CLOTH BROODER FLOOR

The hardware cloth brooder floor above illustrated will greatly reduce disease troubles.

Most little chick diseases are spread by means of the droppings. If the brooder house be equipped with this raised wire platform, the droppings will go through the wire where the chicks will not have access to them. This floor is made of  $\frac{1}{2}$  inch mesh hardware cloth nailed on pieces of 1 x 4's set edgewise. The entire brooder house floor need not be covered, but the hardware cloth floor should be large enough to extend at least 2 $\frac{1}{2}$  feet from the edge of the hover and to accomodate all water and feed vessels placed on it. A walk space should be left around the edges.

The wire floor is made in sections so that it can be handled easily. The size of the sections will depend on the size and shape of the brooder house. Four of the sections are set together forming the wire floor. Where coal brooders are used, a sand box should be made of 1 x 4's the size of the base of the stove and filled with sand to support the weight of the brooder. The frames may fit around this sand box. Oil burning brooders may be set on top of the wire. The frames should have enough cross-pieces to support the hardware cloth without undue sagging.

This system will allow good sanitation without daily cleaning the brooder house, thereby reducing labor. The brooder house floor should have a light covering of litter to prevent the droppings that fall through the wire from sticking.

More heat is required to maintain the proper temperature.

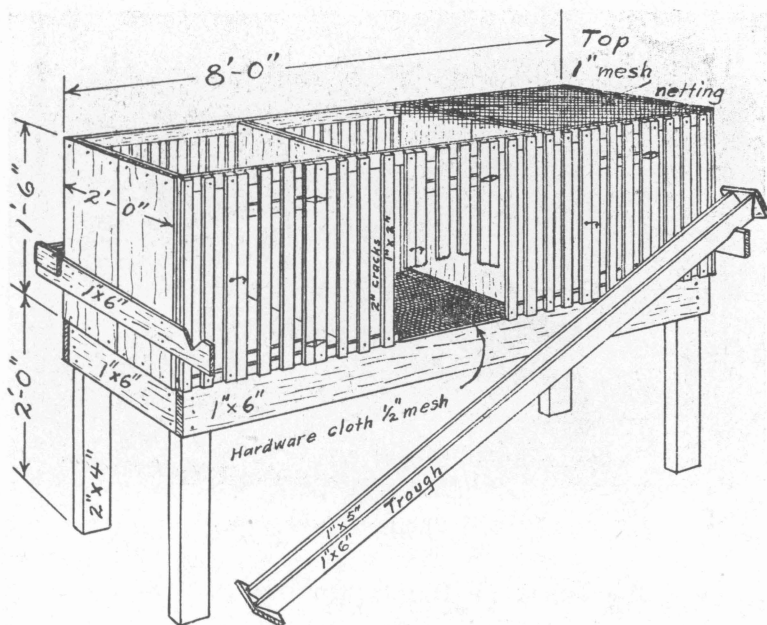


Figure 17—Fattening coop

### FATTENING CRATE

The fattening crate is a simple slatted coop of three compartments with a floor of small mesh wire. A "V" trough is on each side of the coop for feed and water, and the side slats should be far enough apart to allow the birds' heads to reach the troughs.

Old stock as well as broilers and fryers may be finished for market in this simple fattening crate.

### SHIPPING CRATE

Winning at poultry shows often depends on the condition of the fowl on arrival. Individual shipping coops made of light, thin material, as illustrated will keep the bird looking its best.

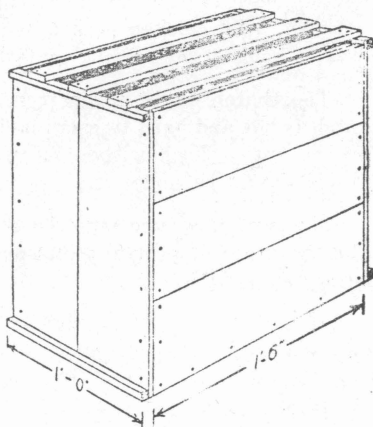


Figure 18—Shipping coop

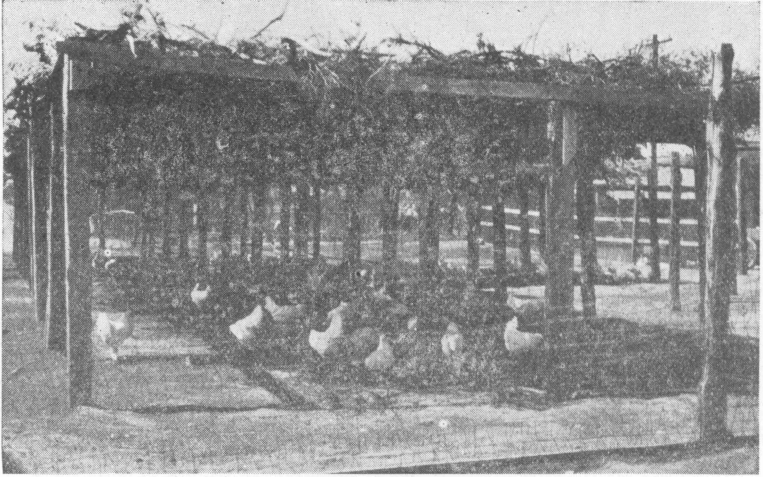


Figure 19—Temporary thatch shade .

### THATCH SHADE

Shade is needed in the summer if the flock is expected to do its best.

The thatch shade shown above will prove excellent while a permanent and natural shade of trees and shrubs is being developed.

The thatch should be located near the chicken house and may be quickly constructed by setting several rows of posts in the ground tying them together with cross pieces and roofing with hay, straw, bundled sorghum or brush. Old chicken or hog wire fencing laid on the crosspieces will serve to hold up the roofing material.

The thatch ought to be from 4 to 6 feet from the ground. A low thatch is hot and hard to clean under. The shade should be large enough for the entire flock without crowding and part of the water and feed vessels should be under it.

Shade of this type must be considered as temporary and should not take the place of proper attention to trees which ought to be grown as quickly as possible.

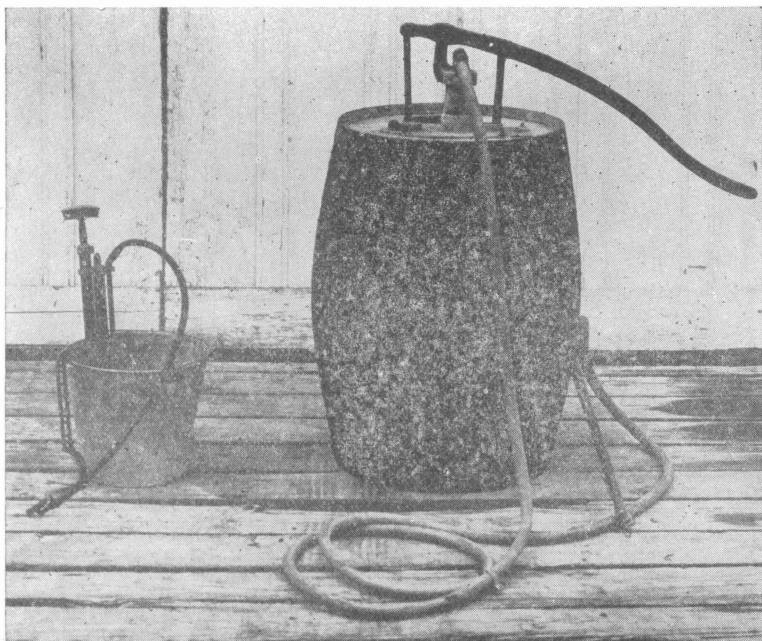


Figure 20—Barrel and bucket sprayers



Figure 21—Compressed air sprayer

## SPRAYERS

"Curealls," tonics and medicines will not replace proper sanitation. Frequent use of a good standard disinfectant in connection with thorough cleaning of the chicken house is the best disease insurance.

A two wheel carrier may be secured for the barrel sprayer, though it may be moved about on a sled also.

The bucket pump and the "knap sack" sprayers are very handy for the small poultryman.

With the exception of the bucket pump these sprayers may be used on small orchards, flowers, etc.

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